

Commonwealth of Massachusetts

Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

January 15, 2019

Robert Gayner, Manager Megunko Transit District, LLC P.O. Box 300 Alton, NH 03809

RE:

Nyanza Chemical Superfund Site, Ashland, MA

Amendment to Grant of Environmental Restriction and Easement

Dear Mr. Gayner:

Enclosed please find a fully executed Amendment to Grant of Environmental Restriction and Easement (Amendment to GERE) with Exhibit 1 for the above-captioned site. Pursuant to 310 CMR 40.1071(3), you must record the Amendment to GERE with Exhibit 1 at the Registry within 30 days of receipt, and within 30 days of recording, you must submit a certified registry copy to the Department of Environmental Protection. Additionally, in accordance with 310 CMR 40.1403(7), within 30 days of recording, you must notify the applicable local officials and the public of the Amendment to GERE.

Very truly yours.

Jennifer L. Davis

ecc:

Dave Buckley, MassDEP

Lisa Thout, EPA

Peter DeCambre, EPA

Emily Byrne, Ashland Solar, LLC

AMENDMENT TO GRANT OF ENVIRONMENTAL RESTRICTION AND EASEMENT M.G.L. c. 21E, § 6 and 310 CMR 40.0000

EPA National Priorities List of Sites: 40 C.F.R. Part 300, Appendix B

Federal Register Site Publication: September 8, 1983

DEP Site Name: Nyanza

DEP Release Tracking No.: 3-0000216

[Note: This instrument is an Amendment to an instrument established as an institutional control for a federal Superfund site, listed on the National Priority List pursuant to Section 105 of CERCLA, 42 U.S.C. §9605 and a disposal site under M.G.L. c. 21E]

This FIRST AMENDMENT to the Grant of Environmental Restriction and Easement referred to below is made this ____ day of ____, 2018 by Megunko Transit District, LLC, with a mailing address of c/o Robert E. Gayner, P.O. Box 300, Alton, New Hampshire 03809 ("Grantor"), through its manager, Robert E. Gayner;

WHEREAS, a Grant of Environmental Restriction and Easement from Grantor to the Department of Environmental Protection, an agency established under the laws of the Commonwealth of Massachusetts, having its principal office at One Winter Street, Boston, Massachusetts 02108 ("DEP"), dated December 28, 2012, has been recorded with the Middlesex County Registry of Deeds in Book 62400, Page 377 (the "Grant");

WHEREAS, Grantor is the current owner in fee simple of a parcel of land located in Ashland, Massachusetts which is the subject of such Grant;

WHEREAS, said certain parcel of land, known and/or numbered as Megunko Road, which is more particularly bounded and described in Exhibit A of said Grant is subject to said Grant (the "Property"). The Property is shown on a plan in Ashland, Massachusetts, Middlesex South Registry of Deeds in Plan Book 2013, Plan 589;

WHEREAS, certain portions of the Property referred to as Area A-1, Area A-2, Area A-3, Area B, Area C and Area D (collectively, the "Restricted Areas") bounded and described in Exhibit B of said Grant, are subject to covenants, restrictions, easements and other rights and obligations under this Grant; the Restricted Areas being shown on a plan consisting of 1 sheet, entitled "Exhibit B Plan of Land" prepared by Hancock Survey Associates, Inc., Danvers, Massachusetts dated April 17, 2008 and recorded with the Middlesex South Registry of Deeds on August 6, 2013, as Plan No. 590 of 2013, being referred to as the "Plan of Restricted Areas");

WHEREAS, Grantor, pursuant to subparagraphs 15 (A) and (B) of said Grant, has submitted to DEP for its review and approval this First Amendment to Grant of Environmental Restriction and Easement (the "First Amendment") along with other supporting documentation as required by subparagraph 15(B);

WHEREAS, DEP has reviewed and approved the terms of the First Amendment, having taken into consideration the review and comment of the United States Environmental Protection Agency ("USEPA") and the Approval with Conditions ("Approval Letter") issued by USEPA and DEP on November 14, 2018, attached hereto as Exhibit 1 and incorporated by reference herein;

NOW, THEREFORE, in accordance with the provisions of the Grant and pursuant to M.G.L. c. 21E, § 6, the aforesaid Megunko Transit District, LLC hereby AMENDS said Grant as follows:

 Subparagraph 3. A. iv. is hereby amended by inserting, after the clause "other construction projects, provided that less than five cubic yard of in-place subsurface soils are excavated";

except as allowed in Subparagraph 3. E.

- 2. Subparagraph 3.E. is hereby inserted after Subparagraph 3.D. as follows:
 - E. For Area B, excavation of soils may be greater than 5 cubic yards provided such excavation is associated with installation or maintenance of utility poles for a photovoltaic solar facility, as approved by EPA and DEP and memorialized in the Approval Letter, attached as Exhibit 1, and complies with the soil management requirements set forth in Subparagraph 3G;
- 3. Subparagraph 3.F. is hereby inserted after Subparagraph 3.E. as follows:
 - F. For Area D, provided the activities listed in 3.F.i.-iv, below, are associated with installation or maintenance of a photovoltaic solar facility as set forth in the Approval Letter, attached as Exhibit 1:
 - soil excavation associated with the installation or maintenance of utility poles provided soil excavation complies with the soil management requirements set forth in Subparagraph 3 G ·
 - soil excavation associated with the installation of grounding plates does not to exceed six inches below the surface;
 - iii. construction of structures; and
 - iv. construction of a roadway.
- 4. Subparagraph 3.G. is hereby inserted after Subparagraph 3.F. as follows:
 - G. For Areas B and D, Grantor shall engage a Licensed Site Professional or other appropriately trained and licensed professional to oversee excavation and screening of soils to ensure:
 - i. any soils excavated as a result of utility pole installation shall be used as backfill around the new utility pole up to 3 feet below the surface;
 - ii. any remaining soils excavated as a result of utility pole installation shall be screened with a Photo Ionization Detector with a 10.6 eV lamp and any soils showing levels greater than 20 ppm shall be managed and shipped off-site in accordance with all local, state, and federal requirements;
 - iii. implementation of measures to limit actual or potential risk to the public health and environment that may arise as a result of such excavation activities; and
 - iv. minimization of exposure to on-site workers.

This First Amendment to the said Grant shall become effective when executed by the Grantor and approved (as to its form) by the Commissioner of the Department of Environmental Protection, and recorded and/or registered with the appropriate Registry of Deeds and/or Land Registration Office.

[Signature Page to Follow]

MEGUNKO TRANSITATION TRIEST, LLC

By
Name: Robert E. Gayner
Its: Manager

On this Manager

In accordance with M.G.L. Chapter 21E, Section 6, as amended, the Commissioner of the Department of Environmental Protection hereby approves this Amendment to said Grant (as to form only).

WITNESS the execution hereof under seal this $\frac{7}{2}$ 9 day of $\frac{1}{2}$ 018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date: 1/15/2019

Martin Suuberg,

Upon recording, return to

Department of Environmental Protection Office of General Counsel One Winter Street, 3rd Floor Boston, MA 02108 Attention: Jennifer Davis



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

November 14, 2018

Robert Gayner, Manager Megunko Transit District, LLC P.O. Box 300 Alton, NH 03809

Emily Byrne, Manager Ashland Solar, LLC 88 Black Falcon Ave., Suite 342 Boston, MA 02210

> RE: NYANZA CHEMICAL SUPERFUND SITE, Ashland, MA Request for Approval, Solar Photovoltaic Facility Ashland Solar, LLC, Solar Array 1 Facility APPROVAL

Dear Mrs. Byrne and Mr. Gayner:

The Massachusetts Department of Environmental Protection (MassDEP) and the U.S. Environmental Protection Agency (EPA) have reviewed the Ashland Solar, LLC's (Ashland Solar) final Request for Approval dated October 2018 to utilize portions of the Nyanza Chemical Waste Dump Superfund Site in Ashland (the Site) for the generation of photovoltaic energy. The property¹ includes the Nyanza landfill cap and is owned by Megunko Transit District, LLC which has entered into a Lease and Easement Agreement with Ashland Solar on June 5, 2017. The

¹ Identified as Lot 3 on the plan entitled "Plan of Land in Ashland, MA" prepared for J.P.I. Apartment Development, Inc. dated January 8, 2003 prepared by Hancock Survey Associates, Inc. and recorded as Plan 966 on July 28, 2006 at the Middlesex Registry of Deeds, Southern District.

Ashland Solar — Solar Array 1 Facility Nyanza Superfund Site, Ashland, MA MassDEP, EPA Approval with Conditions November 14, 2018 Page 2 of 18

Lease and Easement Agreement provides Ashland Solar with access and rights for the production of solar energy.

BACKGROUND

Nyanza Chemical Waste Dump Superfund Site History

The 35-acre former Nyanza Chemical facility is located in Ashland, Middlesex County, Massachusetts, approximately 22 miles west of Boston. The facility is situated in an industrial area 400 feet south of the Sudbury River. Nyanza produced textile dyes from 1917 to 1978. During the period of operation, large volumes of chemical wastes (volatile organic compounds, semi-volatile organic compounds, and heavy metals) were disposed in burial pits, below ground containment structures and various lagoons. Process chemicals that could not be reused or recycled, such as phenol, nitrobenzene, and mercuric sulfate, were disposed of at an on-site landfill or discharged into the Sudbury River mainly through a collection of streams and culverts referred to as Chemical Brook, Trolley Brook, Outfall Creek and the Lower Raceway.

The Site was listed on the National Priority List (NPL) on September 8, 1983. Due to the size and complexity of environmental impacts at the Site, multiple Operable Units ("OUs") were created to allow independent evaluation of distinct portions of the site and/or contaminated media. OU1 is the landfill cap at the Site; OU2 addressed the contaminated groundwater; OU3 addressed contamination in the Eastern Wetland, Chemical Brook, Trolley Brook and Outfall Creek. OU4 addressed the portion of the Sudbury River which became contaminated due to the historic discharge mercury to the Sudbury River. Remedial actions activities have been completed for Operable Units 1, 3, and 4. EPA is currently evaluating remedial actions alternatives for OU2.

The 12-acre Nyanza landfill cap was constructed in two phases under Operable Units 1 and 3. During the first phase completed in 1992, EPA consolidated and isolated wastes under the landfill cap. Additional contaminated sediments were consolidated in the cap in 2001 under Operable Unit 3. Cap construction details are provided in the constructing record drawings dated December 1991, September 2002, and June 2002. Generally, the cap consists of a 6" top soil layer, 18" fill layer, 12" sand drainage layer, an impermeable layer consisting of a 60 mil HDPE geomembrane and a 10" bentonite/soil layer (OU1) or geosynthetic clay liner (OU3), on top of a gas collection layer.

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Proposed Solar Array 1 Facility

Ashland Solar is proposing to construct and operate a PV facility that will generate approximately 5.8 MW DC by two separate solar arrays. The Solar Array 1 Facility will be constructed on the Nyanza cap, and the Solar Array 2 Facility will be constructed south of the cap near the MBTA Access Road. The Solar Array 1 Facility is subject to review and approval by EPA and MassDEP under CERCLA and M.G.L. Chapter 21e. The Solar Array 1 Facility also requires additional approval by MassDEP as Grantee in a Grant of Environmental Restriction and Easement which is discussed later in this document. Subsequent discussions in this document are related only to the proposed Solar Array 1 Facility, and utility pole installations associated with the Solar Array 2 Facility within restricted areas of the site, unless otherwise indicated. For the purposes of the letter, the term "Solar Array Facility 1" includes the solar arrays, any appurtenances to solar array 1 or solar array 2, including utility poles, that are located within the restricted area.

The Solar Array 1 Facility will generate approximately 4.20 MW DC and consist of 11,232 modules and racking systems secured to concrete ballast block foundations, each approximately 9.5 feet long x 2.25 to 2.92 feet wide, and 1.5 feet depth. Ballast blocks will be placed directly on the landfill cap surface prior to the installation of the racks and modules. If ballast blocks need to be shimmed, crushed stone or crushed ABC will be used to provide continuous support of the ballast blocks.

According to calculations submitted by Ashland Solar and its' engineers, the maximum bearing pressure anticipated will be 3.67 psi. This is lower than the calculated allowable bearing capacity of the cap system of 11.12 psi with a factor of safety equal to 3. Ballast blocks will be placed on slopes no greater than ten percent. Ashland Solar has provided a geotechnical evaluation developed by its engineer, Tighe & Bond, which indicates the Solar Array 1 Facility will not cause adverse cap settlement with predicted additional settlement of less than an inch. This predicted settlement is within the tolerance established by the U.S. Army Corps of Engineers and its contractor (Stone & Webster) following completion of the Operable Unit 3 sediment consolidation cap².

Power cables connecting module inverters on the cap will be located above ground in "raceways" with supports set on the ground surface on the cap. With the exception of grounding plates hand dug to a depth of no deeper than 6 inches, no additional intrusive work is required on the cap. The transformer equipment pad will be located within the restricted

² Remedial Action Completion Report, Nyanza Chemical Waste Dump Superfund Site, OU #3 Continuing Source Areas, Ashland, Massachusetts, Prepared by Stone & Webster for Department of Army, Volume II, Appendix H, April 2002

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area of the site but outside the limit of the landfill cap, as will utility poles, which will be installed by Ashland Solar, and Eversource.

Ashland Solar proposes to construct a permanent landfill access road to facilitate the installation process. The access road and turnarounds on the cap will be constructed by the placement of woven geotextile directly over the vegetation layer with a minimum of twelve inches of processed gravel will be placed over the geotextile. The gravel road will traverse the cap perpendicular to the highest elevation contours so as not to impede storm water flow.

No grading changes beyond the proposed cap access road are proposed by Ashland Solar so it is anticipated that post construction storm water will follow the same drainage patterns as current conditions. The Solar Array 1 Facility will modify run off characteristics of a limited portion of the cap by construction of the permanent landfill access road. However, the landfill cap is considered an impervious barrier, so any changes are considered minimal.

Operation and Maintenance

MassDEP is responsible for ensuring the operation and maintenance of the Nyanza Superfund Site Operable Units 1, 3, and 4 remedy components. To the extent that certain areas of the site will be impacted by the installation of the Solar Array 1 Facility, Ashland Solar on behalf of Megunko Transit District, LLC will assume responsibility, with MassDEP oversight, for the maintenance of vegetation in such areas impacted by the Solar Array 1 Facility including constructed roadways.

Inspection, operation, and maintenance requirements specific to the Solar Array 1 Facility will be the responsibility of Ashland Solar and are specified in the Solar Facility Operation and Maintenance Plan attached as Appendix F to the Request for Approval. The Solar Facility Operation and Maintenance Plan details the:

- Roles and responsibilities of Ashland Solar and Megunko Transit District, LLC
- Health and safety issues,
- Vegetation management in areas impacted by the Solar Array 1 Facility,
- Maintenance of the infrastructure such as PV panels and racking systems,
- Visual inspection of the landfill cap, and any other potentially impacted remedy components, and their repair, if needed, and
- A schedule for performing inspections.

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The Solar Array 1 Facility is identified as that area under and within 10 feet of the components including racks, ballast blocks, conduits, raceways, utility poles, inverter and transformer pads, and any improvements such as roadways and roadway crossings constructed by Ashland Solar.

Grant of Environmental Restriction and Easement

Ashland Solar proposes to construct and operate the Solar Array 1 Facility (and install utility poles associated with the Solar Array 2) on property currently subject to land use controls recorded as a Grant of Environmental Restriction and Easement (GERE) at Book 62400, Page 377 at the Middlesex South Registry of Deeds. The GERE restricts certain activities and uses proposed by the Grantor (Megunko Transit District, LLC) and Ashland Solar in Areas B and D as defined in the GERE. Specifically, the construction and operation of the Solar Array 1 Facility requires the excavation of soil (for utility poles and grounding plates), activities that might interfere with remedial actions in existence (access to monitoring wells, impediment of access to the cap), and the construction of roadways and other structures. The installation of utility poles associated with the Solar Array 2 Facility also requires excavation within restricted areas of the site.

In order to initiate construction of the Solar Array 1 Facility and install utility poles associated with the Solar Array 2 Facility, the Grantor must propose an amendment(s) to the GERE to modify the activities and uses required for the construction and operation of the Solar Array 1 Facility that are currently restricted. The proposed amendment(s) is subject to approval by the Grantee (MassDEP) and must include a demonstration that the proposed activities and uses will not result in an unacceptable risk to human health or the environment or interfere with the remedial action. This demonstration shall address, but is not limited to, the considerations listed in Section 5.A.i through ix of the GERE. The restrictions as currently identified in the GERE remain in effect until any proposed amendment(s) is submitted to, and approved by the Grantee, and recorded at the Middlesex South Registry of Deeds.

Financial Assurances

Pursuant to the GERE at Sections 5.A.viii (Financial Assurance) and 15 (Amendment and Release), the Grantor (Megunko Transit District, LLC) must demonstrate "Grantor's financial ability to perform any remedial work that would be required as a result of the proposed activity or use..." This requirement will be achieved by entering into a Standby Trust Agreement establishing a Standby Trust Fund to hold an Irrevocable Standby Letter of Credit in the amount of \$288,000 for the benefit of MassDEP. The Letter of Credit will provide MassDEP access to the funds to implement corrective action to restore the landfill cap and appurtenances thereto

Ashland Solar – Solar Array 1 Facility Nyanza Superfund Site, Ashland, MA MassDEP, EPA Approval with Conditions November 14, 2018 Page 6 of 18

as a result of the Solar Array 1 Facility and to insure the installation, operation and maintenance, and decommissioning of the Solar Array 1 Facility.

Approval

In Section 6 of the Request for Approval, Ashland Solar and its engineer (Tighe & Bond) assert that the construction of the Solar Array 1 Facility will not interfere with the remedy and will not increase risks to human health or the environment. Ashland Solar has provided satisfactory responses to the 9 criteria considered in Section 5.A.i. through ix of the GERE.

After careful review of the proposal and the associated documents submitted in support of it, EPA and MassDEP conditionally approves the request by Ashland Solar to construct and operate the Solar Array 1 Facility at the Nyanza Superfund Site. The following documents submitted by Ashland Solar were reviewed by MassDEP and EPA in their determination that the project will not interfere with the remedy and will not increase risks to human health and the environment:

- "Proposed 5.8 MW DC Ground Mount Photovoltaic Solar Array 0 MBTA Roadway (Map 13 Lot 138), Ashland, MA", Prepared by Allen & Major Associates, Inc. for Ashland Solar LLC - May 18, 2018
- 2. "Site Development Plans for Ashland Solar, Lot 138 off Megunko Rd & MBTA Roadway, Ashland, MA" prepared by Allen & Major Associates, Inc. May 1, 2018.
- 3. "Photovoltaic Module Ground Mount System, RBI Solar Rack Model: GM-2, Ashland Solar, Megunko Rd, Ashland, MA" prepared by RBI Solar (RBI) May 11, 2018.
- 4. "Appendix F Structural Calculations for Citizens Energy, Ashland Solar, Ashland, MA" prepared by RBI May 9, 2018".
- 5. "Ashland Landfill PV Solar Array Bearing Capacity and Settlement Analyses", prepared by Tighe & Bond July 26, 2018.
- 6. "Ashland Solar, LLC Response to Comments MassDEP and EPA", prepared by Tighe & Bond August 14, 2018.
- 7. FAM calculations dated August 16, 2018.
- 8. Cost of demolition to remove and dispose of solar farm, prepared by Associated Building Wreckers, Inc. of Springfield, MA dated August 17, 2018.
- 9. Draft Standby Trust Agreement dated August 29, 2018.
- 10. "Ashland Landfill Solar Responses to Bearing Capacity and Settlement Analysis Peer Review", prepared by Tighe & Bond August 30, 2018.
- 11. "Updated Request for Approval" dated September 6, 2018, prepared by Tighe & Bond for Ashland Solar LLC September 6, 2018, (narrative and appendices):
 - a) Appendix A, Figures
 - b) Appendix B, Memorandum of Lease
 - c) Appendix C, Site Plans

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- d) Appendix D, Electrical Details
- e) Appendix E, Interconnection Agreement and Single-line Diagram
- f) Appendix F, Solar Facility Operations and Maintenance Plan
- g) Appendix G, Decommissioning Plan
- h) Appendix H, RBI Drawings, Structural Analysis Attachments
- 12. Full Set of Stamped Plans dated August 30, 2018
- 13. Ashland Solar, LLC Updated Response to Comments MassDEP and EPA dated September 6, 2018
- 14. "Updated Request for Approval" dated October 2018, prepared by Tighe & Bond for Ashland Solar, LLC October 4, 2018 (narrative and appendices A through I).

This Conditional Approval allows Ashland Solar to operate the Solar Array 1 Facility for 30 years following completion of construction and is subject to the Conditions attached, any Conditions included in any subsequent Notice to Proceed from EPA and MassDEP related to the GERE.

The U.S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection Agency look forward to working with Ashland Solar on implementing this beneficial use of the Site. Review the Conditions of Approval carefully and contact Lisa Thuot (EPA) and David Buckley (MassDEP) with any questions you may have.

Sincerely,

Paul W. Lock

Assistant Commissioner

Bureau of Waste Site Cleanup

Massachusetts Department of Environmental Protection

Dean Tagliaferro, Acting Chief

Dem Tagliaforno

Massachusetts Superfund Section

Office of Site Remediation and Restoration

U.S. Environmental Protection Agency

Ashland Solar – Solar Array 1 Facility Nyanza Superfund Site, Ashland, MA MassDEP, EPA Approval with Conditions November 14, 2018 Page 8 of 18

Cc. David Buckle, BWSC, MassDEP
Jennifer Davis, OGC, MassDEP
Lisa Thuot, Remedial Project Manager, U.S. EPA
Peter DeCambre, Attorney, U.S. EPA
Michael Herbert, Ashland Town Manager
Sheila Page, Ashland Town Planner
Meghan Dos Anjos, Ashland Conservation Agent
Mark Oram, Ashland Board of Health Agent

Ashland Solar – Solar Array 1 Facility Nyanza Superfund Site, Ashland, MA MassDEP, EPA Approval with Conditions November 14, 2018 Page 9 of 18

CONDITIONS OF APPROVAL Ashland Solar, LLC - Solar Array 1 Facility Nyanza Chemical Waste Dump Superfund Site, Ashland, MA

Therefore, pursuant to the Amendment to the Grant of Environmental Restriction and Easement, as approved by EPA and MassDEP, EPA and MassDEP approve the construction and operation of the Solar Array 1 Facility as proposed by Ashland Solar subject to the following Conditions:

Pre-Construction Conditions:

- 1. Megunko Transit District, LLC and Ashland Solar must comply with all requirements identified in the Grant of Environmental Restriction and Easement recorded on August 8, 2013 at Book 62400, Page 377 at the Middlesex South Registry of Deeds, and any amendments recorded after the date of this Approval. Megunko Transit District, LLC and Ashland Solar are also responsible for assuring all contractors involved with the installation of the Solar Array 1 Facility are aware and comply with the GERE including those involved under the Interconnection Service Agreement between Ashland Solar and Eversource.
- 2. In accordance with Section 5.A.viii of the GERE, Ashland Solar shall establish a financial assurance mechanism (FAM) in the amount of \$288,000 with MassDEP as the sole beneficiary no later than sixty (60) days in advance of the proposed commencement date of construction. The FAM shall be established in a form acceptable to MassDEP and EPA to insure the proper installation, operation and maintenance, decommissioning and removal of the Solar Array 1 Facility and restoration of the landfill cap.
- 3. No less than thirty (30) days following the date of this Approval, Ashland Solar shall conduct a pre-construction inspection with its engineer, MassDEP and EPA to evaluate and inspect the landfill cap. Prior to the inspection, the landfill cap vegetation layer shall be cut to a height between four (4) and six (6) inches. In addition, Ashland Solar shall provide to EPA and MassDEP the baseline ground survey conducted by Hancock Associates which should include an updated topographic drawing, an excel document identifying survey points, coordinates and elevation, and reference points. Data should be provided in a CAD format. Any areas of the cap that have undergone isolated minor settlement of twelve (12) inches or less relative to the adjacent cap topography shall be filled with top soil. Isolated settlement greater than twelve (12) inches will be addressed in consultation with MassDEP and EPA.
- 4. No less than fourteen (14) days prior to the start of construction of the Solar Array 1 Facility, Ashland Solar shall submit to EPA and MassDEP for its files, a health and safety plan(s). Ashland Solar shall maintain a copy of the health and safety plan and documentation that

Ashland Solar – Solar Array 1 Facility Nyanza Superfund Site, Ashland, MA MassDEP, EPA Approval with Conditions' November 14, 2018 Page 10 of 18

site personnel have been trained pursuant to the health and safety plan at the site. The health and safety plan shall include, but not be limited to:

- a. Protocols for monitoring of landfill gas (methane, hydrogen sulfide, mercury, etc.) as needed,
- b. Protocols for modifying work practices if landfill gas is detected at levels of concern (action levels),
- Training and instructing all personnel working on the site regarding the potential health and safety hazards at the landfill including, but not limited to those associated with landfill gas,
- d. Training and instructing all personnel how to comply with the Conditions of this
 Approval and to perform authorized activities in a manner that is not hazardous to
 public health, safety, and the environment, and
- e. Protocols for maintaining site security and access.
- 5. No less than fourteen (14) days prior to the start of construction of the Solar Array 1 Facility, Ashland Solar shall submit to EPA and MassDEP an Initial Status Report. The initial Construction Status Report shall include, without limitation:
 - a. The projected schedule for the construction and start-up of the Solar Array 1 Facility including, but not limited to:
 - i. Commencement of construction,
 - ii. Major construction milestones,
 - iii. Completion of construction,
 - iv. Start of operation of the Solar Array 1 Facility, and
 - b. Contact information for key personnel with Ashland Solar, its engineer, and construction contractor.
- 6. No less than fourteen (14) days prior to the start of construction of the Solar Array 1 Facility, all landfill gas vents, groundwater monitoring wells, the terminal manhole, and other existing above ground structures on the landfill's cap and in other areas impacted by construction activities shall be flagged for visibility, and protective barriers shall be placed around such structures, as needed to prevent damage by vehicles accessing the site and from the construction activities. A minimum ten (10) foot radius shall be maintained around all site remedy appurtenances.
- Modification to the existing site security fence is prohibited except for connecting the new security fence for the Solar Array 2 Facility to the existing security fence as detailed in Sheets C-010 of the Permit Application Drawings.
- 8. Ashland Solar agrees all installed high voltage overhead power lines and equipment shall maintain a minimum horizontal distance as measured on the ground to any monitoring well

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- and the terminal manhole of ten (10) feet for kV equal to fifty (50) or less, or ten (10) feet plus four (4) inches for every ten (10) kV over fifty (50) kV.
- 9. Ashland Solar agrees that the construction, installation, operation and maintenance of the Solar Array 1 Facility shall be conducted under the supervision of an independent Massachusetts Registered Professional Engineer(s) ("Engineer of Record") who shall have sufficient qualified staff on-site to provide field supervision and quality assurance/quality control for the construction, installation, maintenance, and decommissioning of the Solar Array 1 Facility. The Engineer's duties shall include, but not be limited to:
 - a. Oversee installation and construction of the components of the Solar Array 1 Facility as outlined above,
 - Oversee quality assurance/quality control (QA/QC) testing and verify all data generated through the testing program, and
 - c. Document all construction and QA/QC activities; and submit monthly construction progress reports to the EPA and MassDEP, which shall summarize the work performed.
- 10. No less than seven (7) days prior to the start of construction, Ashland Solar shall submit to EPA and MassDEP a written summary of compliance with Conditions 1 through 9 and a request for a Notice to Proceed from EPA and MassDEP. Construction shall not begin until the Notice to Proceed for the Solar Array 1 Facility is received.
- 11. This Approval shall expire in three (3) years unless Ashland Solar has completed construction of the Solar Array 1 Facility on or before that date. Ashland Solar may request an extension of this approval, provided it makes such request to EPA and MassDEP in writing by no later than 30 days prior to the expiration date.
- 12. This decision does not relieve Ashland Solar from their obligations to comply with all other applicable federal and state laws and regulations including, but not limited acquiring applicable permits and approvals, including local permits. Ashland Solar and their contractor(s) are responsible to ensure that the proposed work complies with all applicable local, state and federal electrical codes and permits, including the National Electrical Code (NEC), 2011 Edition, Article 690 -"Solar Photovoltaic (PV) Systems", and the requirements of Article 690 of the NEC for restriction of access.

Construction Phase Conditions:

- 13. Ashland Solar shall submit a weekly Construction Status Report to EPA and MassDEP each Friday. Each Construction Status Report shall include, without limitation:
 - a. Summarize the activities conducted at the landfill during the proceeding fourteen (14) day period,
 - b. Identify the major activities Ashland Solar anticipates to perform during the upcoming fourteen (14) day period,

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- c. Identify any problems experienced during the preceding fourteen (14) day period and any corrective actions taken,
- d. Identify any changes to the design of the Solar Array 1 Facility, the project schedule, and the on-site contact information,
- e. Any actions taken to correct such deviations, as required by EPA or MassDEP or recommended by the Engineer,
- f. Discuss status of ballast block surveying effort, and
- g. The Construction Status Report shall be signed and dated by the Engineer certifying that to the best of his/her knowledge all information is accurate and complete.
- 14. During the active construction period, Ashland Solar shall host a bi-weekly meeting (or conference call at the discretion of EPA and MassDEP) at the Site with EPA and MassDEP to be held during normal business hours which will be held between Tuesday and Thursday.
- 15. Ashland Solar shall not deviate from the Approved Request for Approval without prior written notice to EPA and MassDEP. EPA or MassDEP may require Ashland Solar to submit an application to EPA and MassDEP for review and approval for any modification/alteration to the design of the Solar Array 1 Facility that EPA or MassDEP determine are significant.
- 16. Ashland Solar, the Engineer of Record, and Ashland Solar contractors are responsible for ensuring all necessary precautions are taken to protect the health and safety of workers and the general public during the construction and operation of the Solar Array 1 Facility in accordance with applicable state and federal statutes and regulations.
- 17. Vehicles operating on the landfill cap shall only be operated and parked on designated access roads, except for low-pressure construction equipment which may operate off the access roads. All operators of vehicles entering the cap area of the landfill shall, prior to their arrival, be instructed by the Engineer of Record or his/her on-site designee and/or the contractor of the requirements of this Approval to avoid damage to the landfill cap and appurtenances.
- 18. Only low ground pressure construction equipment (with ground pressures of seven (7) PSI or less) may operate on the landfill cap off of the access road, and only in accordance with the Conditions of this Approval. Prior to use of any specific equipment off the access road on the cap, the Engineer shall submit documentation to EPA and MassDEP that the equipment, fully loaded, will have a ground pressure of less than seven (7) PSI.
- 19. The Site Contractor shall be clearly instructed by the Engineer and Ashland Solar of the requirements of this Approval prior to the start of construction to avoid damage to the landfill cap components. Low ground -pressure construction equipment shall limit turning by tracks on the vegetative support layer as much as possible. In no case shall rutting or other disturbance extend more than six (6) inches down into the vegetative support layer. If MassDEP or EPA determines that the use of equipment is creating the potential for

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rutting greater than six (6) inches in depth, or damage to the permeable or the impermeable layer, the usage of such equipment shall cease immediately upon notification by MassDEP or EPA, and alternative work practices for operation of equipment on the cap (i.e. placement of geotextile and crushed stone, as proposed) in the affected area(s) shall be instituted.

- 20. All disturbance of the landfill cap shall be limited to the proposed installations as depicted and described in the Request for Approval and the approved plans. No excavations, except as provided in the GERE, shall penetrate any component of the landfill cap including the vegetation layer.
- 21. All necessary precautions shall be taken to ensure that the proposed construction and maintenance work associated with the Solar Array 1 Facility shall not in any way damage the landfill cap, landfill storm water control structures, monitoring wells, site fencing, the landfill access road, or landfill gas vents. If any damage occurs to any of the above-listed landfill components due to the installation or maintenance of the Solar Array 1 Facility, Ashland Solar shall notify EPA and MassDEP within twenty (24) hours. Ashland Solar shall submit a written plan for repair of the components to EPA and MassDEP within forty-eight (48) hours, and any repair work shall be completed by Ashland Solar on the schedule determined by EPA and MassDEP. Ashland Solar is responsible for the repair of any damage to the landfill cap or landfill cap components which may be caused by the installation or maintenance of the Solar Array 1 Facility.
- 22. EPA and MassDEP and its agents and employees shall have the right to inspect the Solar Array 1 Facility, including, any equipment, structure or land located thereon, to take samples, to perform tests, to take photographs, and have access to and photocopy records, and to otherwise monitor compliance with this Approval and all environmental laws and regulations administered by EPA or MassDEP. Ashland Solar shall provide and not interfere or prevent EPA or MassDEP access to the areas of the occupied by the Solar Array 1 Facility and appurtenances thereto and shall, to the extent of its authority, fully cooperate with EPA and MassDEP accessing other areas of the Site. This Condition does not limit any other access right(s) that EPA or MassDEP have pursuant to any other applicable statute, regulation, or order.

Post Construction Phase Conditions:

23. No later than sixty (60) days after the date of Substantial Completion, as defined in the Engineering, Procurement, and Construction Agreement between Ashland Solar and their contractor, as all materials and equipment having been installed and the project having received an approved Witness Test from the utility (a copy of such approval shall be submitted to EPA and MassDEP within ten (10) days of receipt), Ashland Solar shall submit

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to EPA and MassDEP for review a draft Construction Certification Report prepared by the Engineer of Record. The Construction Certification Report shall include, but is not limited to:

- a. Record Drawings for the final as constructed Solar Array 1 Facility that incorporates all modifications and alterations, if any, made during construction. Such as-built plans shall clearly identify areas of unusual hazard, such as high voltage conduits,
- Data from the weekly construction phase ballast block surveying which should be in the form of an excel document with the coordinate and elevation data provide for each survey point and reference data. Data should also be provided in a CAD format,
- c. A narrative prepared by the Engineer of Record that discusses in part, any modifications made to the design of the Solar Array 1 Facility,
- d. An updated cost estimate for the FAM revised to reflect any changes in the cost for the decommissioning of the as-built Solar Array 1 Facility and the restoration of the landfill cap and appurtenances thereto in areas impacted by the Solar Array 1 Facility to the original design approved by the EPA and MassDEP,
- e. The Request for Approval work plans updated:
 - i. as necessary, to reflect the as-built Solar Array 1 Facility, and
 - ii. to provide for the reporting and repair of any areas of erosion under the direction of the Engineer of Record.
- 24. Ashland Solar shall familiarize the Town of Ashland emergency response agencies (Fire, Police, etc.) with the Solar Array 1 Facility including, without limitation, potential hazards to responding personnel. Ashland Solar shall, prior to commencing operation of the Solar Array 1 Facility, provide documentation to MassDEP and EPA of the actions it has taken to comply with this Condition.
- 25. Within two (2) weeks of EPA and MassDEP's approval of the Construction Certification Report, a final Construction Certification Report shall be submitted to EPA and MassDEP stamped by the engineer of record and signed by Ashland Solar.
- 26. Ashland Solar may commence full time operation of the Solar Array 1 Facility following the successful Witness Test by the utility provided the requirements of Conditions 23 and 24 of this Approval are satisfied, and EPA and DEP approve the Construction Certification Report. Ashland Solar may also commence full time operation of the Solar Array 1 Facility prior to the Approval of the Construction Certification Report if:
 - a. EPA and MassDEP notify Ashland Solar in writing that the Construction Certification Report is inadequate and additional information is required, and/or

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- EPA and MassDEP notify Ashland Solar that the Solar Array 1 Facility has not been constructed in compliance with this Approval, or the approved plans, except as modified in compliance with Condition 15 of this Approval, provided
- c. Ashland Solar addresses the comments to the satisfaction of EPA and MassDEP within sixty (60) days.

Operation and Maintenance Phase Conditions:

- 27. Ashland Solar agrees to and shall maintain for the useful life of the project, without limitation, the following Solar Array 1 Facility records with copies to EPA and MassDEP within two weeks of generation:
 - a. A complete copy of this decision and approval with all application submittals, plans, protocols and attachments,
 - Inspection records required by the Solar Facility O&M Plan, as well as any other site logs, observations, and records that detail activities and conditions at the Solar Array 1 Facility that may have the potential to impact the remedy including, but not limited to,
 - i. damage to the landfill's cap and appurtenances thereto,
 - ii. maintenance and repairs to the Solar Array 1 Facility and landfill cap and appurtenances thereto,
 - iii. summary of any complaints received by Ashland Solar regarding the Solar Array 1 Facility or landfill including, but not limited to the name, address, and contact number of the complainant (if provided), the nature of the complaint, and any actions Ashland Solar took in response to the complaint,
 - c. Details of any incidents that resulted in the response of emergency personnel (fire, police, MassDEP Emergency Response personnel, etc.) to the Solar Array 1 Facility,
 - d. Copies of the Construction Status Reports,
 - e. Copies of Solar Facility O&M Inspection Reports, and
 - f. Records of any damage and repairs of the landfill cap and appurtenances thereto within areas affected by the Solar Array 1 Facility.
- 28. Ashland Solar and their contractor(s) are responsible for ensuring that the inverter and transformer boxes of the electrical equipment pad will not accumulate landfill gas during the construction and operation period of the 5olar Array 1 Facility. Any landfill gas levels exceeding ten (10) percent of the Lower Explosive Limit (% LEL) within any electrical equipment box shall trigger the requirements of 310 CMR 19.132(5)(g), for notification.
- 29. Ashland Solar shall ensure noise generated by the inverters and transformers are compliant with MassDEP's Noise Policy #90-001. If EPA or MassDEP receives nuisance noise complaints or is concerned that noise conditions created by the electrical equipment are not in compliance with MassDEP's Noise Policy (i.e. greater than ten (10) dB above

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background at the property line and the nearest residence) EPA and MassDEP reserves the right to require noise studies and/or the installation of additional noise mitigation measures.

- 30. Ashland Solar agrees to and shall inspect the landfill's cap and appurtenances thereto within the areas affected by the Solar Array 1 Facility at the following frequencies and shall submit the inspection reports to EPA and MassDEP within thirty (30) days of the date of each such inspection as detailed in the Solar Array O&M Plan:
 - a. Not less than monthly during the first year of operation of the Solar Array 1 Facility,
 - b. Not less than quarterly after the first year of operation of the Solar Array 1 Facility, and
 - c. After major storm events (rain, wind etc.) as defined in the Solar Array O&M Plan. This requirement will expire one (1) year following construction completion unless extended by MassDEP and EPA.
- 31. Twelve (12) months following the placement of the final ballast block, Ashland Solar shall have all ballast blocks re-surveyed similarly to the initial construction phase ballast block survey. Data from this survey will be provided to MassDEP and EPA in the same format required in Condition 23.B.
- 32. Ashland Solar agrees to and shall notify the EPA, MassDEP, and the Engineer of Record without delay and in no case more than twenty (24) hours of Ashland Solar or its contractor(s) becoming aware of any damage to the cap layers, the landfill gas vents, or significant erosion of the landfill's cap or damage to the storm water control system, or the receipt by Ashland Solar of any complaint of off-site nuisance conditions attributed to the landfill.
- 33. Ashland Solar and the Engineer of Record shall be considered operators with respect to the construction of the Solar Array 1 Facility and compliance with plans and specifications. Ashland Solar shall also be considered an operator during the operational life and decommissioning of the Solar Array 1 Facility. As such, MassDEP may take enforcement action against Ashland Solar or the Engineer, consistent with its authority under applicable Massachusetts law and regulation, for any failure to construct, operate, maintain or decommission the Solar Array 1 Facility in accordance with approved plans and specifications of which Ashland Solar or the Engineer were, or should have been, aware.
- 34. Ashland Solar may operate the Solar Array 1 Facility, except as otherwise provided in Conditions of this Approval, for a period of thirty (30) years from the date that EPA and MassDEP approve the Construction Certification Report. If Ashland Solar discontinues operation of the Solar Array 1 Facility, Ashland Solar is responsible for decommissioning activities required in this Approval. If Ashland Solar intends to operate the Solar Array 1 Facility after the expiration of this Approval, Ashland Solar is required to submit a

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- request for a renewal at least ninety (90) days prior to the expiration of this Approval to EPA and MassDEP.
- 35. EPA and MassDEP reserve the right to amend, modify, suspend or revoke this Approval.

 This does not limit or restrict MassDEP from implementing any other applicable authority at the landfill including, but not limited to authority pursuant to 310 CMR 40.0000 (Massachusetts Contingency Plan).

Useful Life, Termination, and Decommissioning

- 36. Ashland Solar agrees to decommission and remove the Solar Array 1 Facility from the Site at the end of its useful life or termination of this Approval whichever comes first. The following criteria shall define the end of the useful life of the Solar Array 1 Facility:
 - a. Termination of the Interconnection Permit,
 - Ashland Solar's failure to conduct activities required by the Solar Array O&M Plan for a period greater than six (6) consecutive months,
 - c. The Solar Array 1 Facility is not energized at the point of the interconnection to the Electric Power System (EPS) for a period greater than six (6) consecutive months, or
 - d. Ashland Solar notifies MassDEP and EPA that it will no longer operate the facility.

 Upon the request from MassDEP or EPA, Ashland Solar shall provide evidence that the Solar Array 1 Facility is energized at the point of interconnection with the EPS.
- 37. No later than sixty (60) days following the termination of this Approval or the end of its useful life as defined in Condition 36, Ashland Solar will submit to MassDEP and EPA for approval an updated Decommissioning Plan to restore those portions of the Site including all appurtenances thereto, that require restoration due to the impact of the Solar Array 1 Facility to the preexisting cap conditions.
- 38. No later than sixty (60) days prior to the date that decommissioning of the Solar Array 1
 Facility and restoration of the landfill's cap and appurtenances begins, Ashland Solar agrees to and shall submit to EPA and MassDEP a notice of the planned decommissioning that contains a schedule identifying the proposed start date, completion date, and principle decommissioning and restoration activities. In addition, the notice shall include a health and safety plan(s). Ashland Solar shall maintain a copy of the health and safety plan and documentation that site personnel have been trained pursuant to the health and safety plan at the site. The health and safety plan shall include, but not be limited to:
 - a. Protocols for monitoring of landfill gas (methane, hydrogen sulfide, mercury etc.) as needed.
 - Protocols for modifying work practices if landfill gas is detected at levels of concern (action levels),

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- c. Training and instructing all personnel working on the site regarding the potential health and safety hazards at the landfill including, but not limited to those associated with landfill gas, and
- d. Training and instructing all personnel how to comply with the Conditions of this decision and Approval and to perform authorized activities in a manner that is not hazardous to public health, safety, and the environment.
- 39. No later than ninety (90) days following completion of the Solar Array 1 Facility decommissioning, Ashland Solar shall submit to EPA and MassDEP for acceptance, a draft Closure Certification Report documenting the decommissioning and removal of the Solar Array 1 Facility and the restoration of the landfill's cap and appurtenances thereto, to the pre-existing conditions as detailed in the OU3 Remedial Action Report, Volume I Appendix A: As-Built Drawings and Appendix B: Supplemental Drawings, as well as those details documented from the Solar Array 1 Facility pre construction inspection and survey. The draft Closure Certification Report shall, without limitation:
 - a. Be prepared by a Massachusetts Registered Professional Engineer,
 - b. Be signed by the engineer and Ashland Solar,
 - Include a narrative describing the condition of the landfill's cap and appurtenances
 thereto before and after the decommissioning and removal of the Solar Array 1
 Facility, and
 - d. Include as-built plans showing the final condition of the landfill's cap and appurtenances thereto.

Ashland Solar shall address any deficiencies identified by either EPA or MassDEP within sixty (60) days and resubmit the report. Upon EPA and MassDEP acceptance of the Closure Certification Report, Ashland Solar may request the return of the available funds in the FAM required in Condition 2.

END OF CONDITIONS